

Managing and Reporting Process Improvement Activities

Earned Value

Earned Value

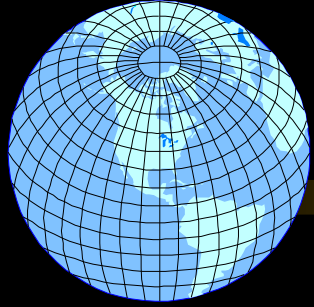
Why Do It?

- Sound fiscal practice:
 - Project Management (e.g., Performance Plan tasks)
 - Process Management (e.g., One Book processes)
- Precursor to Activity Based Costing (ABC) at operating level

Why Use Earned Value?



- Can use methodology for “projects” and “process improvements”
 - Promotes right thinking vice old fiscal approach where victory determined if you spent what you budgeted
 - Has performance based approach to analysis (cost and schedule)

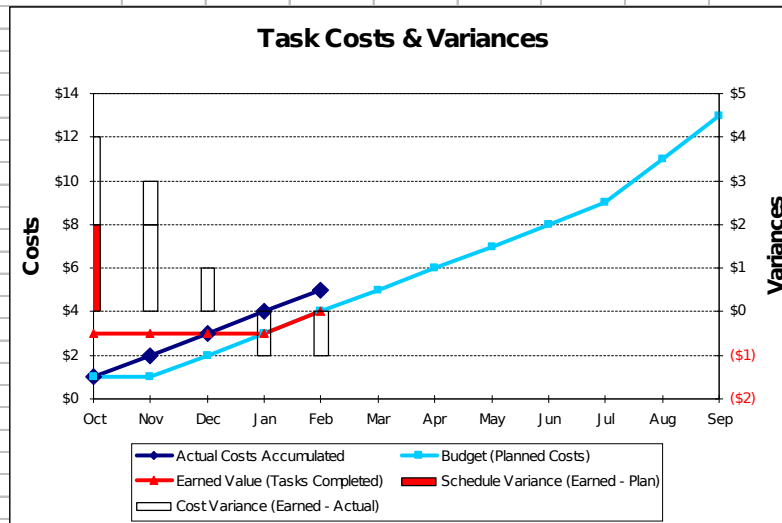


Where in the World is Earned Value?

- Performance is measured by both “effectiveness” and “efficiency”
- Efficiency of our functional processes is measured by the “unit cost” of the products they produce - Not Here
- Effectiveness and Efficiency of our process improvement efforts are measured by what is accomplished at what cost - Here

In the End We Will Have One of These

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Actual Costs Accumulated	\$1	\$2	\$3	\$4	\$5							
Budget (Planned Costs)	\$1	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$11	\$13
Earned Value (Tasks Completed)	\$3	\$3	\$3	\$3	\$4							
Schedule Variance (Earned - Plan)	\$2	\$2	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost Variance (Earned - Actual)	\$2	\$1	\$0	(\$1)	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0



- And will be able to correctly determine and interpret cost and schedule variances

Earned Value

The Essential Data

- What are the TIME PHASED PLANNED costs?
- What are the ACTUAL costs?
- What VALUE did we EARN?

Earned Value

The Essential Information

- Are we on SCHEDULE?
 - If not, how come?
 - What's to be done to correct the course?
- Are we on COST?
 - If not, how come?
 - What's to be done to correct the course?

Earned Value How Is It Done?

Two Examples

Classic “project”

- Performance Plan
“Investment” task

Process Improvement

- Performance Plan
“Performance
Improvement” task

Example - Investment Type

- Task - “Publish policy memorandum on ...”
 - Writing = 15 hours (x AAR/2088)
 - Coordinating = 150 hours (x AAR/2088)
 - Formatting for and posting to HomePage = 10 hours (x AAR/2088)

Investment Task - The Plan

- Step 1 - Define/list the sub-tasks
 - Tool - MS Project
 - Critical to effective Earned Value - How big or small?
 - Small enough so you can “visualize” and “manage” but
 - Not so small that you’re incapable of tracking a task by increments - i.e., no increments left

Investment Task - The Plan

- Step 2 - Define task properties
 - Duration
 - How long should it take?
 - Start
 - Stop
 - Dependencies
 - Have to complete another sub-task before this one starts?
 - Have to start or stop at same time as another?

Investment Task - The Plan

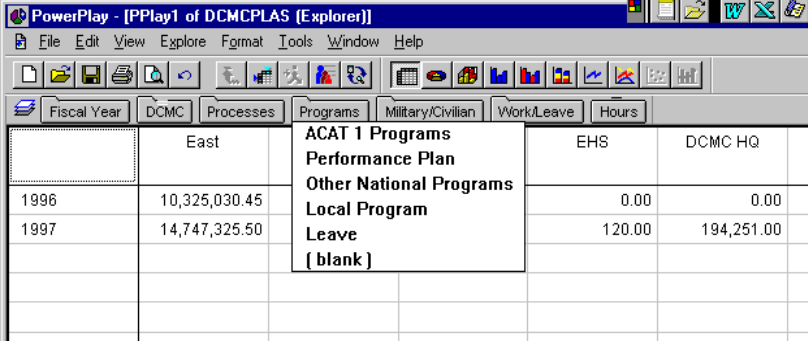
- Step 3 - Define task resources
 - Labor
 - Costs - Body count x AAR/your chosen time period for managing the task
 - Non-labor
 - Costs - Standard to make it e
 - Travel - \$500 per trip
 - Per Diem - \$100 per day
 - All others (e.g., contracted stuff, PCS, material) - actual



Now's
the
time to
save the
BASELI
NE

Investment Task - Actuals

- Labor
 - Data - PLAS
 - All Performance Plan tasks have their own “Program Code” (COGNOS-AQ; PowerPlay; Explorer; file=PLASFY98 or separate process files)
 - AAR x hours from PLAS
 - No overhead allocation



The screenshot shows the PowerPlay software interface with the title bar "PowerPlay - [PPlay1 of DCMCLAS (Explorer)]". The menu bar includes File, Edit, View, Explore, Format, Tools, Window, and Help. The toolbar contains various icons for file operations and data manipulation. The main window displays a table with the following data:

Fiscal Year	DCMC	Processes	Programs	Military/Civilian	Work/Leave	Hours
	East		ACAT 1 Programs		EHS	DCMC HQ
			Performance Plan			
			Other National Programs			
			Local Program			
1996	10,325,030.45		Leave		0.00	0.00
1997	14,747,325.50		(blank)		120.00	194,251.00

Investment Task - Actuals



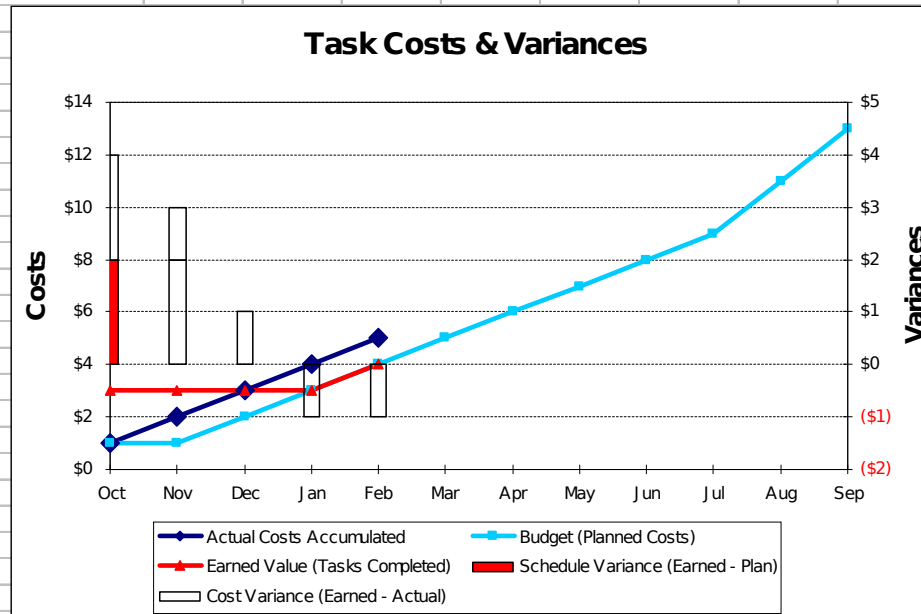
- Non-Labor
 - Data - Your own personal accounting system
 - Take actuals at their planned “unit” cost
 - Variances - Will result from usage differences only

Investment Task - Earned Value

- Task Completion
 - All or nothing - Nyet
 - Percent of completion - Yes
- Therefore:
 - Completion of HALF/50% of the WRITING **earns** you 7.5 hours x \$30 = \$225 of Earned Value
 - Working on WRITING for 7.5 hours does NOT (I.E., earns you nothing)

Let's Fill It Out

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Actual Costs Accumulated	\$1	\$2	\$3	\$4	\$5							
Budget (Planned Costs)	\$1	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$11	\$13
Earned Value (Tasks Completed)	\$3	\$3	\$3	\$3	\$4							
Schedule Variance (Earned - Plan)	\$2	\$2	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost Variance (Earned - Actual)	\$2	\$1	\$0	(\$1)	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0



Example - Performance Improvement Type

- Task - “Increase On-Time...by 10%”
 - Designing = 100 hours (x AAR/2088)
 - Prototyping/Testing = 500 hours (x AAR/2088)
 - Implementing across Command = 6000 hours (x AAR/2088) e.g.
 - “Enabling” material development
 - Training
 - Software installation/system modification

Performance Improvement Task - The Plan

- Step 1 - Define/list the sub-tasks
 - Tool - MS Project
 - The tasks in your project are those things you are going to do to affect an improvement in your metrics performance
 - Are DIRECTLY linked to your process drivers
 - If not...



Performance Improvement - The Plan

- Step 2 - Define tasks and properties
 - Policy Development
 - Duration - 3 months
 - Resources
 - Labor - 5 man months
 - Non-Labor - Travel (\$2000)

Performance Improvement - The Plan

- Step 2 - Define tasks and properties
 - Prototype
 - Duration - 4 months
 - Resources
 - Labor - 28 man months
 - Non-Labor - Travel, contract stuff (\$5000)

Performance Improvement - The Plan

- Step 2 - Define tasks and properties
(continued)
 - Deployment of the new process
 - Duration - Phased over 3 months
 - Resources
 - Labor - 400 man days
 - Non-Labor - Stuff (\$50,000)

Performance Improvement - The Plan

A large, multi-pointed orange starburst with a white outline, centered on the slide. It contains the text 'Now's the time to save the BASELINE' in a bold, purple, serif font.

**Now's
the time
to save
the
BASELI
NE**

Performance Improvement Task

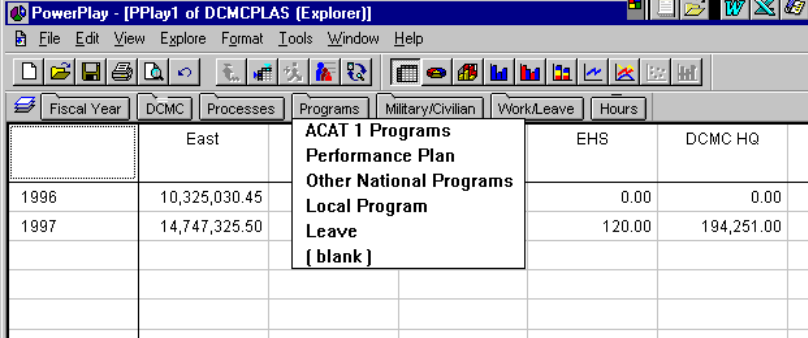
- Labor

- Data - PLAS

- All Performance Plan tasks have their own “Program Code” (COGNOS-AQ; PowerPlay; Explorer; file=PLASFY98 or separate process files)

- AAR x hours from PLAS

- No overhead allocation



Fiscal Year	DCMC	Processes	Programs	Military/Civilian	Work/Leave	Hours
	East		ACAT 1 Programs		EHS	DCMC HQ
			Performance Plan			
			Other National Programs			
1996	10,325,030.45		Local Program		0.00	0.00
1997	14,747,325.50		Leave		120.00	194,251.00
			(blank)			

Performance Improvement Task - Actuals

- Non-Labor
 - Data - Your own personal accounting system
 - Take actuals at the planned “unit” cost
 - Variances - Will result from usage differences only

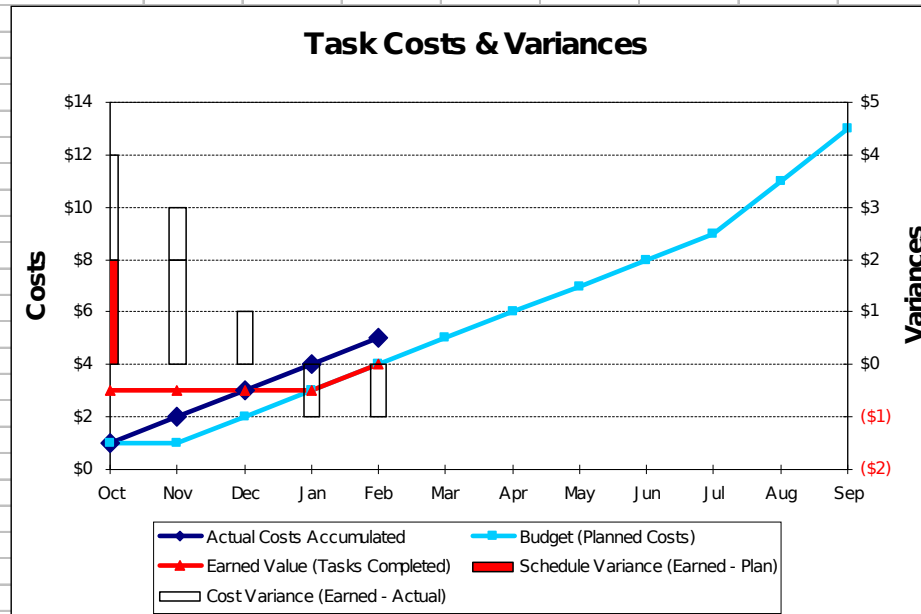
Performance Improvement Task

- Earned Value

- Task Completion
 - All or nothing - Nyet
 - Percent of completion - Da
- Therefore:
 - Completion of HALF/50% of the WRITING **earns** you 7.5 hours x \$30 = \$225 of Earned Value
 - Working on WRITING for 7.5 hours does NOT (I.E., earns you nothing)

Let's Fill It Out - Again

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Actual Costs Accumulated	\$1	\$2	\$3	\$4	\$5							
Budget (Planned Costs)	\$1	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$11	\$13
Earned Value (Tasks Completed)	\$3	\$3	\$3	\$3	\$4							
Schedule Variance (Earned - Plan)	\$2	\$2	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost Variance (Earned - Actual)	\$2	\$1	\$0	(\$1)	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0





Fini